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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,761	01/03/2000	RICHARD G. MILLER	GENSP033	8273

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EXAMINER

MONESTIME, MACKLY

ART UNIT PAPER NUMBER

2676

DATE MAILED: 08/05/2004

16

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/476,761

Applicant(s)

MILLER ET AL.

Examiner

Mackly Monestime

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. The request for reconsideration received on June 16, 2004, has entered and carefully considered. Claims 24-44 are still pending in the application.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 24, 26-37 and 39-43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al (US Patent No. 5,809,321) in view of Cloutier (US Patent No. 5,892,962).
4. Hansen et al were cited in the last office action.
5. As per claims 24, 33, 35-37, 39 and 41-43, Hansen et al substantially disclosed the invention as claimed, including a user configurable universal media processing system arranged to receive and process any number of type of digital data (col. 1, lines 17-20) comprising: a memory unit for storing the digital data including video digital data and audio digital data being processed by said media processing system (col. 3, line 13; Fig. 7, Item No. 132,134); a number of distributed configurable media processing elements suitably arranged to provide distributed processing of digital data each being coupled to the memory unit thereby enabling selected portions of the digital data to be shared among the media processing elements; a control processing element suitably

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arranged to control the distribution of said digital data between some or all the MPE (col. 4, lines 25-33; col. 5, lines 9-15); schedule tasks for the MPEs, wherein each of the distributed MPEs process a selected portion of the digital data in concert with the other MPEs, thereby increasing the overall speed and efficiency of the media processing system (col. 4, lines 42-48), providing a control signal to selected ones of the MPEs wherein said control signals caused the selected MPES to reconfigured in order to process a selected digital data type (col. 4, lines 35-41; and a number of communication busses suitably arranged to interconnect the memory unit, the number of media processing elements and the control processing elements; whereby control signals/ commands and data are transferred throughout the media processing system on separate ones of the communication busses thereby increasing the overall processing power of the media processing system (Fig. 7, Items No. 126,144; Fig. 13, Items No. 160, 162).

Hansen et al did not disclose that at least one of said configurable MPEs is configured to act, at least in part, as a control processing element to control the distribution of digital data to MPEs. However, Cloutier disclosed a computer architecture for parallel processors in which a plurality of programmable devices (FPGA) adapted to be programmed as one or more processing elements (col. 1, lines 5-6; col. 2, lines 9-13) and wherein one of the processing element is configured to act as a processing controller for the other processing elements (col. 11, lines 62-67). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combined the teachings of Cloutier with the teachings of Hansen et al because doing so

would provide a flexible computer architecture that can be programmed in a wide variety of ways to perform a wide variety of applications such as image processing, pattern recognition and neural network algorithms.

The combination did not explicitly disclose that one the configurable MPEs is dynamically configured. However, it is well known that automatization is not an expedient for patentability, In re Venner, 120 USPQ 192 (CCPA 1958), it is well settled that it is not an inventive step to provide a mechanical or automatic means to replace manual activity which has accomplished the same result. In re Rundell 18 CCPA 1290, 48 F.2d 958, 9 USPQ 220.

6. As per claim 26, Hansen et al disclosed: wherein each of the MPEs is a single instruction stream, multiple data stream general purpose very long word RISC processor capable of operating independently of the other MPEs (col. 3, lines 38-39; col. 15, lines 3-6).

7. As per claims 27-28, Hansen et al disclosed: wherein based upon a signal provided by the processor control element, selected ones of the MPEs perform a particular task (col. 4, lines 42-48); wherein the particular task is selected from a group that includes graphics processing, database searching, numerical processing, video processing (col. 11, lines 19-21).

8. As per claims 29-31, Hansen et al disclosed that the digital data is stored on an external medium, wherein the external medium includes a compact disc, laser disc, digital versatile disc (col. 8, lines 58-67; col. 9, lines 1-6) and wherein the respective formats includes a compressed audio format, a first and second type compressed video

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format and first and second type compressed audio format such that the universal media processor identifies the particular format and reconfigures selected ones of the MPES accordingly in order to process the corresponding digital data (col. 3, lines 26-36; col. 2, lines 23-32).

9. As per claim 32, Hansen et al disclosed a main memory (col. 3, lines 12-13) the number of busses includes a main bus coupled to the main memory, a supplemental bus separate from the main system bus arranged to communicate with the main system memory capable of providing linear data transfer; and a communication bus used to transfer data between selected ones of the MPEs and provides a link between the MPEs and a selected one of a number of peripheral device (Fig. 7, Items No. 126,144; Fig. 13, Items No. 160, 162).

10. As per claims 34 and 40, Hansen et al disclosed storing the digital data in a memory device coupled to each of the MPEs (Fig. 6, Item No. 12 and 92).

11. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al in view of Cloutier and further in view of Baker et al (US Patent No. 6,347,344).

12. Baker et al were cited in the last office action.

13. As per claim 25, Hansen et al did not explicitly disclose a data stream parser unit coupled to the memory to parse the digital data into a number of sub-area streams. However, Hansen et al did disclose the use of a data router in a multi processor system to route data to different processing devices (Fig. 19, Item No. 266). Moreover, the concepts and associated advantages of using a data stream parser is well known in the art, it can be evidenced in the reference by Baker et al in which a data streamer

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configured to schedule data transfers among a plurality of modules disposed within the multimedia processor in accordance with the corresponding channel allocations (col. 4, lines 40-44). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have included the data streamer of Baker et al into the multimedia system of Hansen et al because doing so would enhance data transfers within the multimedia system by configuring the data streamer to transfer data simultaneously to among various processing devices, thereby increase the overall processing speed of the multimedia processing system.

14. Claims 38 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al in view of Cloutier and Cloutier et al and further in view of Uenoyama et al (US Patent No. 5,982,432).

15. Cloutier et al, and Uenoyama et al were cited in the last office action.

16. As per claims 38 and 44, Hansen et al did not explicitly disclosed: wherein said digital video data is compressed in a first standardized format and wherein first standardized format compressed video data to produce compressed video images and image data; for decoding said standardized format compressed video images to generate full motion video pixel data; and sharing DRAM between said MPEs and decoding for producing a full motion video signal from said full motion video pixel data. However, Cloutier et al disclosed said digital data including video data that is compressed in a standardized format; means for processing said digital data that includes said standardized format compressed video data to produce compressed video images and image data (col. 14, lines 66-67); means for decoding said standardized

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format compressed video images to generate full motion video pixel data; means for sharing DRAM between processing means and said decoding means (col. 2, lines 49-63; col. 3, lines 9-15; col. 13, lines 45-54). Cloutier et al. did not specifically disclose means for producing a full motion video signal from said full motion video pixel data. However, Cloutier et al. did disclose the use of MPEG in his system. As well known to those of ordinary skill in this technology, MPEG processing provides compression coding of up to 30 frames per second of full motion video signals along with a corresponding high quality sound signal, therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the MPEG taught by Cloutier et al. to provide a full motion video signal from a full motion video pixel data.

The combination did not disclose means for decoding the first standardized format compressed video images is adapted for reconfigured to decode digital data including that is compressed in a second standardized format. However, Uenoyama et al disclose a picture conversion apparatus in which digital picture signals compressed in a first format into a plurality of digital picture signals compressed in a second format different from the first format (col. 103, lines 55-60). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the cited references because they are all directed from the same field of endeavor. One of ordinary skilled in the graphics art would have been motivated to do so because such features would provide a picture providing system for providing digital picture signals compressed according to a compression format requested by the user.



***Response to Arguments***

Applicant's arguments with respect to claims 24-44 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855. The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew, can be reached on (703) 308-6829.

**Any response to this action should be mailed to:**

Commissioner of Patent and Trademarks

Washington, D.C. 20231

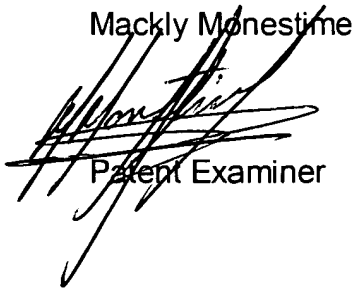
**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Va, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Mackly Monestime

A handwritten signature in black ink, appearing to read 'Mackly Monestime', written over the printed name.

Patent Examiner

July 26, 2004

A handwritten signature in black ink, appearing to read 'Matthew C. Bella', written over the printed name.

MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600